

First Chemical Industries Conference

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How can the Egyptian Chemical Industry benefit from European and International Knowledge on Chemicals?

Benefit for Egyptian Industry

- Useful Data Sources
 - CLP Regulation Art. 42: classification and labelling inventory and Annex VI: Legally classified substances
 - REACH Regulation Art. 119: Inventory of hazardous substances
 - EU Substances lists
 - OECD eChem Portal
- REACH Art. 57: Substances of very high Concern
- Biocides
- OECD and EU Test Guidelines
- Risk Assessment Methodology
- Risk Assessment Terminology

CLP Regulation 1272/2008 – Annex VI Table 3.1

Classification according to CLP Regulation

International Chemical Identification	EC No	CAS No	Classification		Labelling		
			Hazard Class and Category Code(s)	Hazard statement Code(s)	Pictogram , Signal Word Code(s)	Hazard statement Code(s)	Suppl. Hazard statement Code(s)
hydrogen	215-605-7	1333-74-0	Flam. Gas 1 Press. Gas	H220	GHS02 GHS04 Dgr	H220	
aluminium lithium hydride	240-877-9	16853-85-3	Water-react. 1	H260	GHS02 Dgr	H260	
sodium hydride	231-587-3	7646-69-7	Water-react. 1	H260	GHS02 Dgr	H260	

<http://ecb.jrc.ec.europa.eu/esis> → C&P → Annex VI → Table 3.1

CLP Regulation 1272/2008 – Annex VI – Table 3.2

Classification according to Dir. 67/548/EEC

Index No	International Chemical Identification	EC No	CAS No	Classification	Labelling
001-001-00-9	hydrogen	215-605-7	1333-74-0	F+; R12	F+ R: 12 S: (2-)9-16-33
001-002-00-4	aluminium lithium hydride	240-877-9	16853-85-3	F; R15	F R: 15 S: (2-)7/8-24/25-43
001-003-00-X	sodium hydride	231-587-3	7646-69-7	F; R15	F R: 15 S: (2-)7/8-24/25-43

<http://ecb.jrc.ec.europa.eu/esis> → C&P → Annex VI → Table 3.2

Inventory I

- **CLP Regulation Art. 42(1)**
 - The Agency (ECHA) shall establish and maintain a classification and labelling inventory in the form of a publicly accessible database.
 - Manufacturers and importers have to submit the classification and labelling of hazardous substances to ECHA by 3 January 2011.

Inventory II

- **REACH Regulation Art. 119(1)**
 - The Agency (ECHA) shall make the following information publicly accessible in a database:
 - Chemical name of hazardous substance
 - Classification and labelling
 - Physico-chemical and environmental fate data
 - Results of toxicological and ecotoxicological studies
 - DNEL and PNEC values
 - Guidance on safe use
 - Analytical methods

EU Lists of Substances I

European Chemical Substances Information System (ESIS)

- <http://ecb.jrc.ec.europa.eu/esis/>
- EINECS (existing chemicals)
- ELINCS (new chemicals)
- NLP (no longer polymers)
- PBT (persistent, bioaccumulative, toxic)
- Biocides
- Classification and Labelling

EU Lists of Substances II

European Chemical Substances Information System (ESIS) continued

- 2782 HPVC (high production volume chemicals)
- 7829 LPVC (low production volume chemicals)
- IUCLID data sets
- ORATS (Online Risk Assessment Tracking System) = 141 substances

EU Pesticide Database

http://ec.europa.eu/sanco_pesticides/public/index.cfm

Registration data for active substances

- Data for EU maximum residue limits

OECD eChem Portal

- Developed by request of the WSSD 2002 to improve the hazard data on chemicals
- eChem Portal is a contribution to SAICM.
 - This portal contains data from international, regional, and national governmental chemicals programmes
- <http://www.oecd.org/ehs> → Directories and databases
- <http://webnet3.oecd.org/echempportal/>

REACH Authorisation I

- **Article 57** „Substances of very high concern (SVHC)“:
 - Carcinogen Category 1 or 2
 - Mutagen Category 1 or 2
 - Toxic for reproduction Category 1 or 2
 - Persistent, bioaccumulative and toxic
 - Very persistent and very bioaccumulative
 - Endocrine disruptor

REACH Authorisation I

SVHC Candidate List

- Substance
- EC No
- Date of inclusion
- Reason for inclusion
- Support Document
- Decision No.
- http://guidance.echa.europa.eu/authorisation_en.htm
- http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Biocides – Directive 98/8/EC

EU Commission Website:

<http://ec.europa.eu/environment/biocides/>

- Review programme of substances
- Substances included in Annex I or IA
- Register of biocidal products: This is a registration programme for products

Test Guidelines

- OECD Test Guidelines: <http://www.oecd.org/ehs>
→ Chemicals Testing Guidelines
- EU Test Guidelines Annex V of Dir. 67/548/EEC: <http://ecb.jrc.ec.europa.eu/testing-methods/>
- EU Test Guidelines for REACH: Commission Regulation (EC) No 440/2008: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:142:0001:0739:EN:PDF> (These are more or less the same Test Guidelines as under Annex V)

Risk Assessment Methodology

ECHA published extensive Guidance documents for risk assessment methods of chemicals:

http://guidance.echa.europa.eu/guidance_en.htm → Guidance on Information Requirements and Chemical Safety Report; use the pathfinder to locate the document of your special interest.

Glossary of Scientific Terms

- IPCS/OECD Risk Assessment Terminology:
<http://www.who.int/ipcs/methods/harmonization/areas/terminology/en/index.html>
- University of Oxford: Chemical Safety Information - Glossary:
<http://msds.chem.ox.ac.uk/glossary/GLOSSARY.html>
- IUPAC Compendium of chemical Terminology
<http://goldbook.iupac.org/>

How to find a CAS number?

- CAS Numbers are unique identifiers of chemical names and the best way to find a chemical in the internet.
- United States National Institute for Standards and Technology (NIST):
<http://webbook.nist.gov/chemistry/name-ser.html>
 - Example: Chlorobenzene
 - CAS No: Chlorobenzene [108-90-7]